1. Product Features

Gigabit Ethernet 802.3at PoE+ Media Converter:

- Interface
  - RJ45 interface with Data + Power output
  - LC fiber optic slot
  - 52~56V DC power input socket
- PoE
  - Complies with IEEE 802.3af and IEEE 802.3at standard, end-span PSE
  - Provides 52~56V DC power over RJ45 Ethernet cable to devices with Ethernet port
  - Supports PoE power up to 30 watts for PoE port
  - Auto detects IEEE 802.3at/IEEE 802.3af PoE equipment, protecting the devices from being damaged by incorrect installation
  - Remote power feeding up to 100m
  - IEEE 802.3at/IEEE 802.3af splitter devices compatibility

- Hardware
  - Metal case
  - LED indicators
    - Power LED
    - PoE-in-use
    - Fiber LNK/ACT
    - TP LNK/ACT
  - DIP switch: LFP (Link Fault Passthrough) mode selection
  - 9K maximum frame size supported
  - Wall-mount or DIN-rail installation (optional)

2. Checklist

Your GTP-805A carton should contain the following items:

Media Converter x 1	User's Manual x 1
AC-DC Adapter (Input: 52~56V DC) x 1	

If any item is missing or damaged, please consult the dealer from whom you purchased your Gigabit Ethernet 802.3at PoE+ Media Converter.

Note The GTP-805A comes with one vacant SFP module slot. The mini GBIC SFP module is not included in the package.

3. Product Outlook

Front Panel

There are one RJ45 twisted-pair jack (auto-MDI/MDI-X), one 100/1000X fiber-optic SFP slot and four LED indicators.
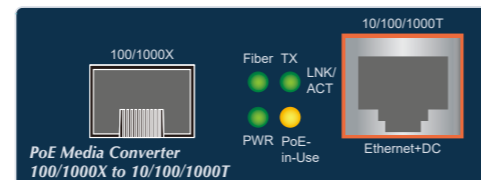
Figure 1: Front Panel of the GTP-805A

Rear Panel

There is one DIP switch for Link Fault Passthrough (LFP) feature. It is turned on for Link Loss Carry Forward (LLCF) and Link Loss Return (LLR) detection but this feature is not operable when turned off. Please refer to the following sections for more. There is also one DC 52V~56V power socket for the Gigabit Ethernet 802.3at PoE+ Media Converter.
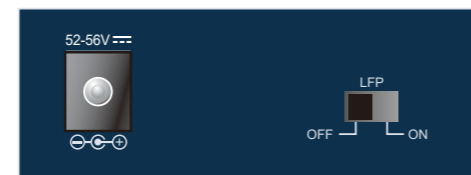
Figure 2: Rear Panel of the GTP-805A

Power Information

The power jack of the Gigabit Ethernet 802.3at PoE+ Media Converter measures **2.1mm** in diameter, and comes with 52~56V DC power input. It conforms to the bundled AC-DC adapter. Should you have the issue of making the power connection, please contact your local sales representative.

4. Link Fault Pass-through (LFP)

The LFP function includes LLCF and LLR. LLCF and LLR can immediately alarm administrators the issue of the link media and provide efficient solution to monitor the network. The LFP function can be disabled or enabled by the DIP switch.

LLCF means when a device is connected to the converter and the TP line loses the link, the converter's fiber will disconnect the transmission link. LLR (Link Loss Return) means when a device is connected to the converter and the fiber line loses the link, the converter's fiber will disconnect the transmission link.

Note LFP function is ON by default setting. If you are familiar with the network installation and for diagnostic purpose (i.e. check which end is broken), you can turn it off and reset the converter to make it take effect. Otherwise, please remain it in the default position.

5. Installing The Converter

To install the GTP-805A, simply complete the following steps:

Ethernet Installation

Step 1: Turn off the power of the device/station in a network to which the GTP-805A will be attached.

Step 2: Ensure that there is no activity in the network.

Step 3: Attach fiber cable from the GTP-805A to the fiber network.

Step 4: Attach a Cat.5/5e/6 UTP cable from the 10/100/1000BASE-T network to the RJ45 port on the GTP-805A.

Step 5: Connect the 52~56V DC power adapter to the GTP-805A and verify that the Power LED lights up.

Step 6: Turn on the power of the device/station; the TX Link and FX Link LEDs should light up when all cables are attached.
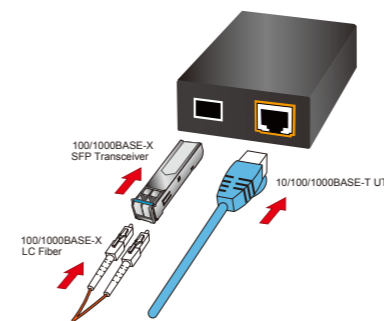
Figure 3: GTP-805A Installation

Note
1. It is recommended to use PLANET MFB/MGB series 100/1000BASE-FX/SX/LX SFP on the GTP-805A. If you insert an SFP transceiver that is not supported, the GTP-805A will not recognize it.
2. Please check the link-budget of your SFP transceivers and its physical wiring distance. In some installation, an in-line optical attenuator may be required to protect your transceivers.
3. RJ45/STP, UTP Cat5/5e/6, or straight/crossover cable is accepted; please refer to section 8 for more about the wiring distance of your TP, optic-fiber networks.

PoE Function

The installation of the GTP-805A and the IEEE 802.3at/802.3af Injector/Splitter.

Before your installation, it is recommended to check your network environment. If there is any IEEE 802.3at/802.3af devices that need to be powered on, the GTP-805A can provide you with a way to supply power for this Ethernet device conveniently and easily.

The GTP-805A equips an AC-DC adapter with DC 54V input and it injects the DC power into the pin of the twisted-pair cable (Pins 1, 2, 3 and 6).
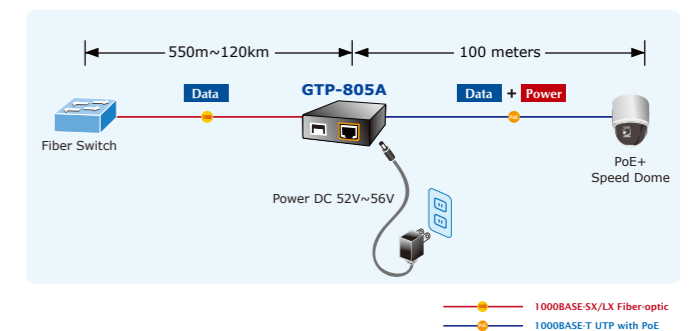
For the places hard to find the power inlet, the GTP-805A provides the easiest way to power your powered device such as an IP camera or wireless access point via PLANET IEEE 802.3at/802.3af Power over Ethernet Splitter (POE-161S/162S) over a long distance if necessary.
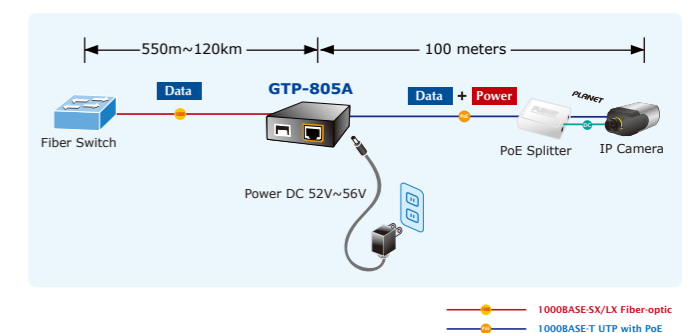
6. Duplex Mode Support

The GTP-805A TP port supports triple speed -- 10/100/1000BASE-T auto-negotiation. It will auto detect the link speed and the duplex mode by default with its link partner. The fiber port (100/1000BASE-FX/SX/LX) allows **100/1000Mbps full duplex** by auto-negotiation. Please also check the setting of the link partner as well.

7. LED Indication

System

LED	Color	Description
PWR	Green	Lit indicates the device is powered.

10/100/1000BASE-T Port

LED	Color		Function
LNK/ ACT	Green	Blink	Indicating that the PoE+ Media Converter is actively sending or receiving data over that port.
		Light	Indicating that the port is linked up at 10/100/1000Mbps.
		Off	Indicating that the port is linked down.
PoE in Use	Orange	Light	Indicating that the port is providing PoE power to remote powered device.
		Off	Indicating that the port is not providing PoE power to remote powered device.

100/1000BASE-X Fiber Port

LED	Color		Function
LNK/ ACT	Green	Blink	Indicating that the PoE+ Media Converter is actively sending or receiving data over that port.
		Light	Indicating that the port is linked up.
		Off	Indicating that the port is linked down.

8. Cable Connection Parameter

The wiring details are shown below:

Duplex	Connection	Limitation (max.)
Twisted Pair		
Half/Full	Node to Node Node to Switch/Hub	100 meters

Fiber Optic Cables:

Standard (Wavelength)	100BASE-FX (1310nm)	1000BASE-SX (850nm)	1000BASE-LX (1310nm)
Fiber Type & Cable Specifications	Multi-mode	50/125μm or 62.5/125μm	
	Single-mode	9/125μm	

9. Product Specifications

Model	GTP-805A
Interface	
Copper Port	10/100/1000BASE-T Ethernet TP interface Auto-negotiation, auto MDI/MDI-X with PoE injector function
SFP Interface	100/1000BASE-X SFP interface
Fiber Mode	May vary on SFP Module
Fiber Port Type (connector)	SFP, LC type
Fiber Maximum Distance	May vary on SFP Module
Power Over Ethernet	
PoE Output	IEEE 802.3af Power over Ethernet PSE IEEE 802.3at Power over Ethernet Plus PSE
Power Output	PoE 52~56V DC, 30 watts
PoE Power Supply Type	end-span
Power Pin Assignment	1/2 (+), 3/6 (-)
PoE Power Budget	30 watts
Hardware Specifications	
Switch Architecture	Store-and-Forward
Flow Control	Back pressure for half duplex mode IEEE 802.3x pause frame for full duplex mode
Maximum Frame Size	9K
LED	System: PWR Fiber 100/1000BASE-X: LNK/ACT TP 10/100/1000BASE-T: LNK/ACT PoE: Power-in-use
Dimensions (W x D x H)	70 x 97 x 26 mm
Weight	0.21kg
Power Supply	52~56V DC, external AC-to-DC adapter

LFP Mode	Enable: Shut down either TP port or fiber port that is broken Disable: Link LED indicators still on if connection of the other end is broken
Installation	Wall-mount or DIN-rail installation
Standards Conformance	
Regulatory Compliance	FCC Part 15 Class A, CE
Protocols and Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u 100BASE-TX/100BASE-FX IEEE 802.3ab Gigabit Ethernet IEEE 802.3z Gigabit Ethernet over Fiber Optic IEEE 802.3x Flow Control IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet enhancements standard
Cables	TP: Cat 5/5e/6 UTP cable Fiber: Multi-mode: 50/125μm or 62.5/125μm optic fiber Single-mode: 9/125μm optic fiber
Environment	
Temperature	0~50 degrees C
Humidity	5~90% (non-condensing)

Note
1. For connection to the Gigabit Ethernet products, please refer to the device's technical manual.
2. Consult your dealer for DIN-rail installation.

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100/1000BASE-X to 10/100/1000BASE-T 802.3at PoE+ Media Converter

▶ GTP-805A

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EC Declaration of Conformity

I hereby confirm that the following equipment complies with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility Directive on (2014/30/EU).

Type of Product:
100/1000BASE-X to 10/100/1000BASE-T PoE+ Media Converter

Model:
GTP-805A

Produced by:
Manufacturer's Name: **Planet Technology Corporation**
Manufacturer's Address: 10F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan, R.O.C.

For the evaluation regarding the EMC, the following standards were applied:

EN 55032	(2015 + AC:2016)
EN61000-3-2	(2014)
EN61000-3-3	(2013)
EN 55024	(2010 + A1:2015)
EN 55035	(2017)

Person responsible for making this declaration
Name: Kent Kang
Title: Director

Taiwan	May 29, 2018	
Country	*Date*	*Legal Signature*

PLANET TECHNOLOGY CORPORATION